

## #002 System Safety Fundamentals

This course instructs the student in the fundamentals of system safety engineering, system safety management, and hazard analysis of hardware, software, and operations. Basic concepts and principles of the analytical process are stressed, and guidance is provided on identifying generic hazards, causes, and consequences. The student is introduced to NASA publications and requirements that guide safety analysis as well as to general reference texts on subject areas covered. Types and techniques of hazard analysis are addressed in enough detail to give the student a working knowledge of their uses and how they are accomplished. Skill in analytical techniques is developed through the use of practical exercises

**About the instructor:**

Mr. Larry Gregg, ASP, employed with Muniz Engineering, Inc., holds a B.S. in Chemical Engineering from Oklahoma State University and an MBA from Golden Gate University. He served 20 years with the US Air Force, obtaining extensive experience in instruction including over 7 years as a missile launch instructor in the Strategic Air Command. In the 3 ½ years prior to his retirement, he held the position of System Safety Branch Chief for the defense, surveillance, and experimental programs at the Air Force Space Systems Division in Los Angeles, CA., where he developed and taught a week-long course in acquisition system safety.

**Topics covered include:**

- System Safety Basic Concepts
- Hazard Analysis Basics
- Risk Assessment
- Test/Facilities Safety
- Preliminary Hazard Analysis
- Energy Trace & Barrier Analysis
- Change Analysis
- Introduction to Software Safety
- Management Oversight & Risk Tree (MORT)
- System Safety Management

**Dates:**

**August 19, - September 2, 2005**

**Who should take this course:**

Safety Management and Engineering Professionals involved in the performance of system safety analyses, and are in the review of designs, operations, and safety analysis data.

**Location:**  
**Marshall Space Flight Center**

**This course provides 3.0  
Continuing Education Units**

To register, please contact:  
**Georgann Crump, Mailstop: CO20**  
**Telephone: 256.544.6525, Fax: 256.544.4809**